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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/082,455

02/25/2002

Alfred Wade Muldoon

4357

7590

10/21/2003

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EXAMINER

POLK, SHARON A

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,455

Applicant(s)

MULDOON, ALFRED WADE

Examiner

Sharon Polk

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-10 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 16-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant may consider adding (provided support can be found within the specification) some of the arguments to distinguish the claims over prior art. For example, Applicant argues, that Szynal et al. has a conditioning circuit, yet the claimed invention does not. If the prior art has an additional element, not claimed, it is cannot be excluded solely on that basis. Additionally, Applicant claims that Szynal signal is not compared to a signal from another ac connection. This feature is not explicitly claimed.

Specification

2. The substitute specification filed June 20, 2003 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: a statement as to lack of new matter is missing.

Claim Objections

3. The objections to the claims have been withdrawn based upon the amendment filed June 20, 2003.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2836

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Szynal et al., (Szynal), US 5,202,582.

With regard to **claims 1, and 11**, Szynal teaches an electronic control (14) with a power supply (18) that isolates the control voltages from the ac source (10), said control having a plurality of connections between digital nodes (20, 22) and ac nodes (fig. 2), said connections being made through passive components (40, 44, 46), the subsequent signals on digital nodes being compared to determine the state of one or more ac paths (e.g., abstract, 3:65-4:11).

Szynal does not explicitly disclose the nodes being digital. However, based upon Applicants definition of a digital node, on page 3, lines 14-15, which defines them as “...either digital inputs **or the supply voltages for digital circuitry,**” (emphasis added) this would be an inherent function of the nodes as disclosed, in that they provided a voltage to the processor of the control (14).

With regard to **claims 2, and 12**, Szynal teaches the state of the ac paths indicates whether a switching device is open or closed (e.g., abstract).

With regard to **claims 3, and 13**, Szynal teaches the state of the ac paths indicates whether a functional load is present (e.g., 12).

With regard to **claims 4, and 14**, Szynal teaches the claimed zero crossing determination (e.g., abstract, 3:59-64).

With regard to **claims 5, and 15**, Szynal teaches passive current limiting device (i.e., resistors), which are used to control or limit current.

Allowable Subject Matter

5. Claims 6-10 are allowed. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or fairly suggest isolating control voltages from source voltages by having a plurality of electrical connections between digital nodes and ac nodes, wherein said connections are made *solely* through passive components in combination with the additional recited elements as claimed.

Claims 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Claim 16 contains what was deemed allowable with respect to claim 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Pertinent Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Nos. 3,944,909, and 5,760,493 disclose similar aspects of the claimed invention.

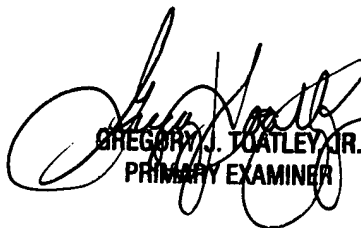
Communication with the PTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon Polk whose telephone number is 703-308-6257. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

sp


GREGORY J. TOATLEY, JR.
PRIMARY EXAMINER